Network Control Center

STDN DAILY REPORT
FOR GMT DAYS
14, 15, 16 AND 17 DECEMBER 2000

Part I. Operations

14 DECEMBER

A. SN Anomalies - None.

B. ISS/ECOMM Anomalies:

1. ISS Support 14/0935-0956Z

ISS reported not receiving data at AOS. STGT indicated that there was no user ephemeris in their system. NCC transmitted a vector, to acquired lock at 095600Z. The problem appears to be a vector processing software anomaly at NCC. This anomaly is under investigation. TTR # 23317

TDS 0935-1000Z 21 minutes service/data loss non-recoverable

C. GN Anomalies:

1. AGS/WIRE Support 14/0438-0449Z

The POCC reported a negative acquisition reason unknown. The operator slewed the antenna throughout the event without success. AGS believes that the POCCs acquisition data maybe off. No data loss was declared by POCC.
TTR # 23315 CDS ID # 17693

2. AGS/EO-1 Support 14/0513-0525Z

The POCC reported no command capability due to the PTP halting The PTP was rebooted to restore the service, however

the reboot caused a loss of real time data flow and command capability to the MOC. TTR # 23316 CDS ID# 17694

12 mins service/data loss recoverable

3. AGS/SAMPEX Support 14/1700-1714Z

At AOS, the antenna ran into azimuth limits and required hand cranking to get it out of limits. It took several minutes to reacquire the S/C by inserting track at the ACC. The carrier was brought up manually and modulation was applied. Sweeping of the carrier was attempted, but not accomplished. The S/C receiver was not locked and commands could not be verified by project. This was probably due to the carrier not sweeping the S/C before modulation was applied. It was too late to re-sweep the carrier to achieve S/C receiver lock.
TTR # 23218 CDS ID# 17696

12 mins 57 secs service/data loss recoverable

15 DECEMBER

A. SN Anomalies:

1. EO-1 Support 15/0510-0522Z

EO-1 scheduled blind acquisition, the POCC did not start receiving data until 05:21:07Z. The forward sweep was performed twice, and the event locked after the second sweep sequence.
TTR # 23322

TDE 0510-0540Z 11 mins 17 secs service/data loss recoverable

2. EO-1 Support 15/2052-2102Z

The event was not scheduled in WDIS due to a NCC operator error. TTR # 23328

20 minutes service/data loss recoverable.

3 EO-1 Support 15/0248-0250Z

EO1 dropped out prior to Los, unable to re-establish link. POCC suspects space craft was possibly out of view. SGLT-3 had no anomalies during the event, dropout was observed on both SSA1 return chains. A forward re-sweep was not attempted due to the time remaining. TTR # 23320

0230-0250Z 171 SSA1 1 Min 42 Secs svc/data loss recoverable

4. HST Support 15/0209-0210Z

HST reported data dropouts from 02:09:32 to 02:09:53Z. STGT indicated SGLT-2 recorded no anomalies. Tech Control reported problems with a T1 line (DHEM 956810). TTR # 23319

015630-024826Z TDW SSA1 21 Secs svc/data loss recoverable

B. ISS/ECOMM Anomalies - None.

C. GN Anomalies:

1. AGS/WIRE Support 15/0256-0308Z

TPCE could not make data connections with the project, however the command connections were established. AGS was able to collect the data and send it to the project. AGS indicated that the problem appears to be at the project.
TTR # 23321 CDS # 17701

10 Mins. 39 Secs. service/data loss recoverable

3. PF1/LANDSAT-7 Support 15/2055-2058Z

This was an X-El support and when the track was switched from S-band to X-band at 8 degrees elevation, the antenna immediately drove off of the X-band signal. Switched track back to S-band but when antenna drove off signal,received several

thousand CRC errors on both X1 and X2 downlink data. Tracked in S-band for the remainder of the support with no further CRC errors. Estimate that ~15% of the X-band data was lost when antenna drove off X-band signal during X-El track. TTR # 23337 CDS ID # 17718

2255-2111Z 1 Min. 21 Sec. Svc/Data Loss (Non-Recov)

2. PF1/LANDSAT-7 Support 15/2150-2206Z

The MMRCV-B did not achieve lock on the X2 downlink during this test support pass and the AMPEX B did not record any data. This was to be a dual downlink test pass for the certification of the DataLynx tracking system. Post pass it was determined that the down-converter had been disconnected.
TTR # 23323 CDS ID# 17702

14 mins 08 secs service/data loss non-recoverable

3. PF1/QUICKSCAT Support 15/0529-0533Z

Late AOS on 4K data, due to the RFI interference signal at the PF1 site. TTR # 23324 CDS ID#17703

052957-053228Z 2 mins 31 secs service/data loss non-recoverable

4. SGS T-1 Line Outage 14/0655-15/1330Z

SGS experienced T-1 line outage that impacted numerous events All data is recoverable. TTR # 23326 & 23327 CDS ID# 17704

5. SGS/QST Support 14/1236-1249Z

When the T1 line was down the operator tried to reset one of the router at site. This reset caused the Node to loose connection to the PTP. This again resulted in manual operation of the PTP. Due to the T1 line being down the operator didn't transfer the PTP files post pass as normal. TTR # 23327 CDS ID# 17708

11 mins 36 secs service/data loss recoverable

16 DECEMBER

· SN Anomalies:

1. EO-1 Anomaly 16/0244-0613Z

EO1 had a data dropout coinciding with a RF drop-out. No forward link problems were noted with this event. Event at 05:54:00 (SHO ID# 5272202) was similar to above event. RF was seen to decay to nothing on the console spectrum analyzer, reason unknown. A forward link re-sweep was requested by EO1 MOCC. While the re-sweep was in progress the return chains reacquired. The re-sweep was terminated and the remainder of the event was nominal. Return dropout was from 06:06:57 to 06:08:41, total time 1 minute 4 seconds. TTR # 23330

TDE 0238-0252Z SSA1F/R 2 Min. 08 Sec. Svc/Data Loss (Recov)
171 0554-0613Z SSA1F/R 1 Min. 44 Sec. Svc/Data Loss (Recov)

2. SPTR Anomaly 16/1635-1610Z

At 1635Z WSC and South Pole lost SPTR connectivity through the NISN Network. MSFC trouble desk reported a scheduled resizing of the backbone at MSFC was ongoing which the station and Customer was unaware of. Request NISN include WSC and SPTR Customer to notification alert when known activities will impact SPTR connection thru NISN.

TDS-1 1503-1959Z No Data Loss Declared.

B. ISS/ECOMM Anomalies - None.

· GN Anomalies:

1. PF1/EO-1 Support 16/0817-0829Z

Failed test support. The X-Band data did not get recorded on the Ampex recorders because the ECL Switch was not working properly. Although the status light of the ECL Switch was showing green, the Ampex recorders were recording garbage data. A total loss of X1 for this support. Auto-Track was successful, no S-Band data loss. 10 min 16 sec loss unrecoverable. TTR # 23338 CDS ID # 17719

0817-0829Z 10 Min. 16 Sec. Svc/Data Loss (Non-Recov)

2. WGS/COBE Support 16/1218-1232Z

Master failed to transfer schedule. While attempting to do a manual schedule at the SCC, noticed that the Station Clock had stopped. Went to the antenna pedestal to reset the antenna controller and then attempted to set clock to no avail. Rebooted the SCC and clock began to up date. Scheduled the COBE pass manually and antenna began to go to prepass position. After getting to the IP, the clock and all other functions stopped again. Troubleshooting in progress. TTR # 23331 CDS # 17711

1218-1232Z 14 Min. Svc/Data Loss (Recov)

3. SGS/EO-1 Support 16/1145-1147Z

At 11:44:54 a stored S/C command started X-band dump. We lost autotrack 6 seconds later and acquired approximately 1 minute later, in program track. Once we acquired again we auto tracked the S/C all the way through. The problem is only related to EO1 S/C as far as we can determine, due to the fact that the problem is not present at LS7 or AM1. TTR # 23332 CDS # 17712

1143-1157Z 1 Min. 13 Sec. Svc/Data Loss (Non-Recov)

4. WGS/EO-1 Support 16/1513-1526Z

SCC locking up when schedule transfers, system clock halted. Upon arriving on station it was passed onto us that the system

was not operating normally, they're appeared to be a problem with the antenna or the Master.The station was rebooted, in addition to shutting the SCC all the way down. When the system was back up and a schedule was sent over from the Master it would lock up the SCC, the real time clock on the top left would halt. Attempted other reboots and finally ran out of time for the scheduled EO1 pass. TTR # 23333 CDS ID # 17713

1513-1526Z 13 Min. Svc/Data Loss (Recov)

5. AGS/EO1 Support 16/2218-2230Z

At AOS the MOC indicated they did not have connection. The AGS operator enabled all streams and the sockets connected and data was established. The operator also noticed that the TDF and Metrums did not start up. The TDF was started, however the Metrums would not start due to the Master crash. Only realtime and X-band data was recorded due to PTP problems. The entire system was rebooted post pass to clear the problem.
TTR # 23334 CDS # 17715

11 Mins 46 Secs. Svc/Data Loss (Recov/Non-recov)

17 DECEMBER

A. SN Anomalies: - None.

B. ISS/ECOMM Anomalies - None.

C. GN Anomalies:

1. WGS/EO-1 Support 17/0216-0404Z

The Project reported they were having difficulty getting commands into the S/C and receiver lock was degraded.
. Following the support, the operator looked at the HPA output on the SCC display and it indicated a high VSWR. Use of this system for uplink could burn out the HPA. The Project recommended shifting any support that requires an uplink to another station.

TTR # 23335 CDS ID # 17716

0216-0229Z 13 Min. Svc/Data Loss (Non-Recov)
0356-0404Z 08 Min. Svc/Data Loss (Non-Recov)

2. WGS/ IMP-8 Support 17/0239-1205Z

The power to the Antenna Controller was down. The circuit breaker 1 on panel-A tripped. A Reset on the breaker was done and in about 90 seconds it tripped, again. Breaker would not stay on. Troubleshooting the system revealed that the cable going from the junction box in the hydraulic building for the Satan-2 Antenna Y-Axis was shorted. We have not been able to determine the location of the short. Wallops is unable to support IMP-8 until the Antenna is repaired. TTR # 23336 CDS ID # 17717

0239-1205Z 9 Hours 26 Min. Svc/Data Loss (Non-Recov)

Part II. Testing Anomalies

A. SN Test

1. 1. Sea Launch Vector Verification 15/1700-15/1830Z NCC/NISN/FDF/ WSC

Objectives: A. To test the transmission of multiple maneuver sequence vectors in support of the SeaLaunch XM-Radio mission support.

Results: Objective Partially Met.

Remarks: The prelaunch vector transmission procedures were practiced per normal mission support. The test conductor slipped the liftoff time by 4 seconds which made FDF slip the maneuver sequence vectors and

retransmit after the simulated liftoff. Two SICs were used for this support. All parameters of both SHOs were thoroughly checked at NCC and WSC. FDF also retransmitted the burn 2 vectors for the PLU Sho. No problems were found with the vector transmission. WSC will do a delog to check the antenna pointing and vector downloads. The TDMs were received for the 3335 SIC at FDF, but not for the 1580 SIC due to the EXEC data base at WSC. NCC will write a letter to WSC to update there computers as per procedure. The test will be re-ran completely on Tuesday 19 Dec 2000 to check the Times for both SIC. After the vector transmission was complete, the NOMs practiced sending reconfiguration messages. More than 40 messages were sent to WSC for proficiency

B. GN Test

1. STS SSME OPS Recorder Playback I/F Between MIL/PDL & KSC/RPS — 15/1400-15/1600Z — NCC/KSC/RPS /MIL/WSC

Objectives: To verify that the modified PSK DEMODS AT PDL can support STS-98 Shuttle Mission

Results: Objectives Met.

Remarks: All objectives were met. All PSK demods were tested during a series of three test runs. PDL transmitted the data and KSC/RPS was able to view all three main engines during each run. KSC/RPS was satisfied with the content and quality of the data. All entities were satisfied with the results of this test.

Part III. Equipment Status Changes:

Part IV. Scheduled Activities:

NOAA-16 McMURDO Command System Test 18/1330-2000Z

Low Power Transceiver Demonstration 18/1400-1630Z

Norway SKS TERRA GSIP Command Data Capture Test
18/1530-1630Z

Part V. Launch Forecast Changes:

1.) M2098LS (STS-98/ISS-07,5A) 018 18 JAN.,2001
T-0 = 0736Z

* 2.) M2102LS (STS-102/ISS-08,5A.1) NET 01 MAR.,2001
T-0 = 2017Z